



## Testing Requirements

The current inspection process is to verify the materials as they are constructed. The required basic testing is indicated below, along with observing the installation method and materials are in compliance with the Adopted Standards. Verification of the required materials to be used and instillation performance is the responsibility of the permittee and must be made available to the City upon request. If the City has requested material verification from the permittee and the permittee does not submit the required documentation within a reasonable amount of time then the City will take further enforcement actions including, but not limited to, issuance of a Stop Work Order and default of the Permittee’s bond.

All required testing indicated here must be done in the presence of an LDD inspector.

### Storm Sewer

All Storm Sewer crossings within the Right-of-Way shall be backfilled with flowable fill unless the permittee provides certified compaction test results from a third party testing laboratory. The testing laboratory will certify the compaction of the trench meets the required City specifications as identified in KCMO/APWA Section 2602.3.C.

**\* For requests for the following testing requirements please contact the inspector assigned to the project a minimum of 24 hours in advance to schedule a time to conduct the testing. For Street light testing please contact a minimum of 48 hours in advance so that coordination with Public Works can be arranged.**

### Sanitary Sewer

All Sanitary Sewer Pipes and Structures shall be tested in accordance with KCMO/APWA Section 2509.4 and 2509.5 and 2510.9 for Exfiltration, Deflection, and Infiltration/Inflow.

#### Exfiltration (Air Test)

Pipe Size	Required Time per 100 LF	Maximum Required Time
8”	70 sec.	227 sec.
10”	110 sec.	283 sec.
12”	158 sec.	340 sec.
15”	248 sec.	425 sec.
18”	356 sec.	510 sec.
21”	485 sec.	595 sec.
24”	634 sec.	680 sec.
27”	765 sec.	765 sec.
30”	851 sec.	851 sec.

#### Deflection (Mandrel Test)

D and L Dimensions For 9 Arm Mandrel					
Nominal Diameter	L (Min)	ASTM 3034 SDR 35	ASTM 3034 SDR 26	ASTM 2241 SDR 21	ASTM 679 T-1 Wall
8”	8”	7.52”	7.37”	7.41”	--
10”	10”	9.40”	9.21”	9.24”	--
12”	12”	11.19”	10.96”	10.96”	--
15”	15”	13.70”	13.42”	--	--
18”	18”	--	--	15.47”	16.76”
21”	21”	--	--	--	19.74”
24”	24”	--	--	20.63”	22.21”
27”	27”	--	--	--	25.03”

#### Infiltration/Inflow (Vacuum Test)

Manhole Depth	Time (minutes)
10 feet or less	2
10.1 to 15 feet	2.5
15.1 to 25 feet	3

### Subgrade

The subgrade underneath all roadway sections shall be Roll Tested in accordance with KCMO/APWA Section 2201.3. The roll test truck shall be of a tandem axle variety with a load of at least 20 tons. If the sub-grade fails the roll test, the permit holder will be notified via email and documented as an inspection in KIVA that may be viewed through KIVANET.

### Street Lights

All Street Light Construction shall be tested in accordance the KCMO/APWA Section 2809 for cable and operation prior to a request for service application being sent to the power company. The Cable inspection (Pre-Burn Test) is conducted first after the lights are constructed, followed by the request for service being sent to the power company. Once the power has been delivered to the system a 14 day burn test is conducted prior to the permit being closed.